

## Equal Sharing Problems and Iowa Core Mathematics

Complete column 2 for each standard. Use the last row to add additional standards.

| Iowa Core Mathematics Standard   | <b>Explanation</b><br>What do children learn about this standard by solving Equal Sharing problems?<br>Think about the evidence you might see in students' work. |
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| <b>3.NF.A.1</b> Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ .   |  |
| <b>4.NF.B.4a</b> Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.<br>a. Understand a fraction $a/b$ as a multiple of $1/b$ . <i>For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>.</i>   |  |
| <b>5.NF.B.3</b> Interpret a fraction as division of the numerator by the denominator ( $a/b = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret <math>3/4</math> as the result of dividing 3 by 4, noting that <math>3/4</math> multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size <math>3/4</math>. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i> |  |
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